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(54) **Blended missile autopilot**

(57) Blended missile autopilots (20) for a missile (11) employing direct lift and tail controlled autopilots (22, 21) coupled by way of a blending filter (24). The blended missile autopilots (20) have movable tails (13) aft of the center of gravity of the missile (11) and side force thrusters (15) or movable canards (14) mounted forward of the center of gravity, and that are controlled using the direct lift and tail-controlled autopilots (22, 21). Lift is generated from the tails (13) and side force is gen-

erated by the thrusters (15) or canards (14), such that the body of the missile (11) maintains zero angle of attack and generates no lift. The present invention thus combines the fast response of a direct lift autopilot (22) with the high acceleration capability of a body lift autopilot (21), and blends the two using the blending filter (24) to achieve improved performance.

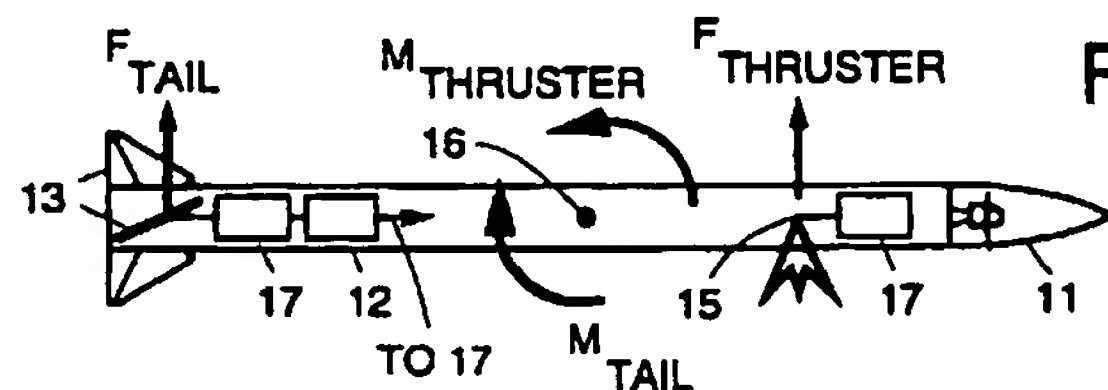


Fig. 1d

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EUROPEAN SEARCH REPORT

Application Number
EP 96 30 3437

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
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Y	* abstract *	5	
	* page 2, column 2, line 36 - page 4, column 6, line 58; figures 1-9 *		
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	* page 5, line 8 - page 10, line 14; figures 1-5 *		
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 8 October 1998	Examiner Blondel, F
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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Application Number
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Place of search THE HAGUE		Date of completion of the search 8 October 1998	Examiner Blondel, F
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